



MICROTECTURE™

Integrated Software for Design Professionals

COMPUTER AIDED DESIGN AND DRAFTING - PRODUCT DESCRIPTION

DataCAD2 is a powerful two-dimensional Computer Aided Design and Drafting system which runs in full color and at several screen resolutions. MICROTECTURE brings many of the advantages of mainframe CAD systems to the micro-computer user. The system is designed specifically for Architects and Engineers and uses a number of time saving features that make drawing production fast and precise and allow drawings to be modified easily.

Like other MICROTECTURE software, DataCAD2 is easy to use, with on-screen documentation and status information which provides a rapid learning curve and accelerated system payback. DataCAD2 represents a new generation of advanced, low cost computer aided design offering expanded capability for the production of design, development, and construction drawings. DataCAD2 provides an impressive array of advanced drafting features not available on any other small CAD system.

ELECTRONIC DRAFTING

Computer aided design software allows you to take advantage of the many time saving capabilities that a computer can provide. Like a text editor for drawings, the DataCAD2 program allows complex drawings to be created by using drawing commands to create lines, circles, arcs and freeform shapes. Patterns and details may be moved, rotated or copied to create larger drawings in less time than with manual methods. Changes, modifications, and additions to construction drawings are easy and fast.

EASE OF USE

Emphasis has been placed on a simple and understandable command structure so that even designers with no previous computer experience can learn to use the system quickly. The menu driven system allows you to select commands from the screen by pointing to them with the mouse or by using the function keys. Each sub-menu displays a new set of function keys relating to the command selected. In addition, a large number of global commands are available directly from the keyboard. These keyboard commands are interrupt driven, allowing you to combine the advantages of both the hierarchical and command driven menu formats.

SCALE AND ZOOM

Because you are trained to use specific architectural and engineering scales when you draw, DataCAD2 uses discrete scales when zooming up or down on the drawing surface. A shape displayed on the monitor is represented at its actual size according to the scale selected. The monitor also displays information about the current status of the program. Drawing scale, drawing layer and name, and current menu option selected are constantly displayed for your reference.

MULTIPLE LAYERS, COLORS, & LINETYPES

Following the analogy of overlay drafting, a drawing may be organized as a series of transparent layers. As many as 1024 different drawing layers may be stored within a single drawing file. Each layer may be given its own name and grid size and may be selectively turned on or off to display the desired collection of information for the particular type of editing being done. Optional color capability can be used to distinguish line types and levels during the design process. Individual layers may be saved separately on disk, or merged with other drawings.

FLEXIBLE GRIDS

DataCAD2 makes extensive use of grids and offers many grid options including rotated grids. Since each drawing layer can have its own grid settings, the size and offset of each layer can be set to the optimal value for the type of information being stored within that layer.

TEMPLATE LIBRARIES - ON-SCREEN TEMPLATES

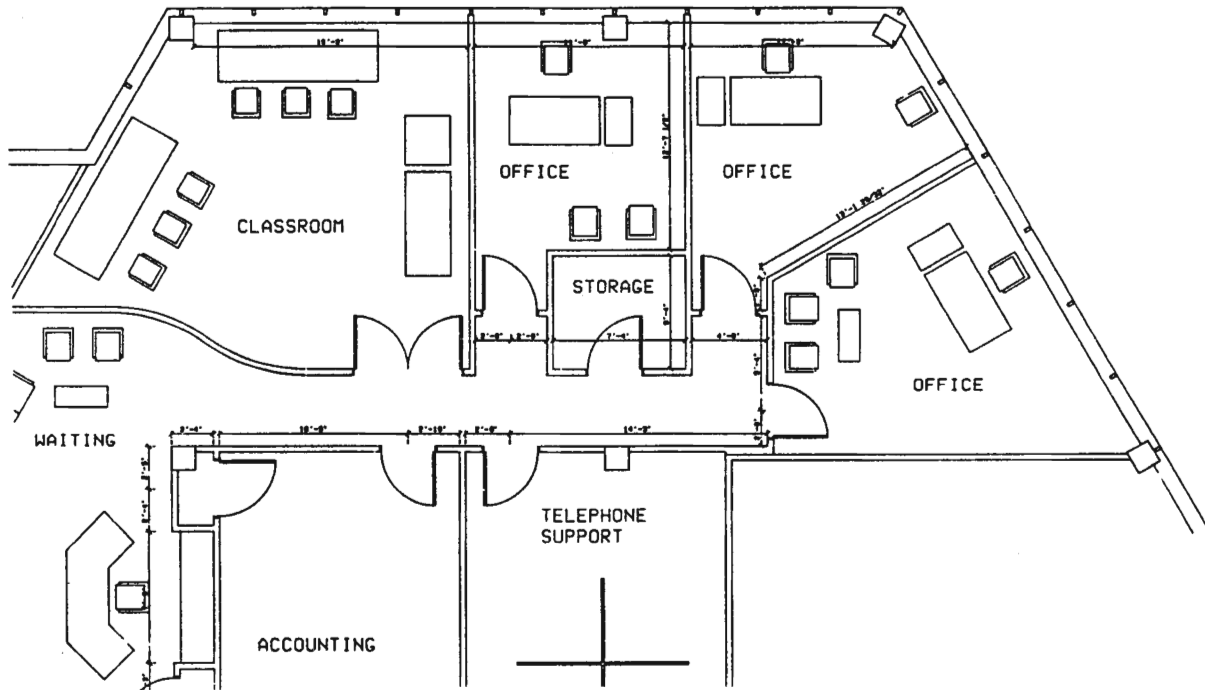
The template function allows the designer to make efficient use of previously designed shapes, details, and drafting symbols. Once an object or symbol has been drawn, it may be stored permanently in a template library and later recalled to the screen for use. Groups of symbols may be collected in customized libraries containing standard symbol sets, typical office details, furniture, or electrical fixtures.

TEMPLATE DATABASING

The template system also provides a powerful databasing capability. Each template symbol may be assigned up to 16 database attributes such as size, description, price, etc. These may be used in combination with a spread-sheet form definition to create drawing schedules, inventories, cost estimates, or a variety of other report formats you can create yourself. These capabilities advance the utility of the small CAD system as an organizer for project specifications, cost control and management, as well as a tool for design and drafting.

PLOTTED DRAWINGS

A variety of plotters are supported, including Houston Instruments models. Vellum or mylar may be used for presentation quality plots in ink, with sheet sizes of up to 36 inches in width on the larger plotters. Different colors and line widths may be used in any layer, and partial plots may be defined for hard-copy detail libraries or progress prints.



INTEGRATED TO PROJECT COSTING

For users of MICROTECTURE'S project costing module, DataCAD2 provides integrated and automated posting of time spent on the CAD system. Employee name, project number, phase, and service information are maintained with each drawing file. This information may be posted to the project costing module and becomes available to any of the reporting capabilities within the Financial Management System.

THE COMPLETE SYSTEM

Template libraries, user-definable line types, hatching, architectural features, auto-dimensioning, template databasing, and a project costing interface are just a few of the advanced features which make DataCAD2 the most powerful design and drafting software available to micro-computer users.

AUTOMATIC DIMENSIONING

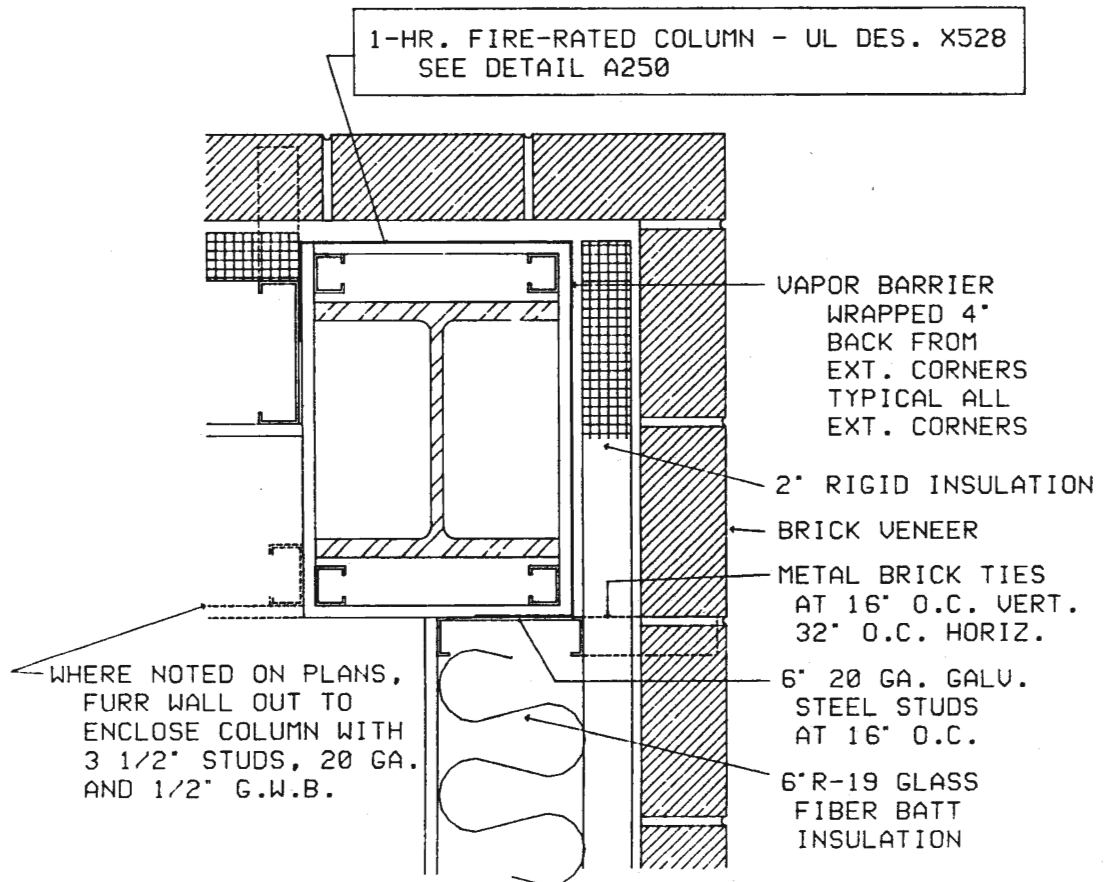
The automatic dimensioning capability can be used to run string lines in architectural, engineering, or metric units. Four types of termination marks may be selected to suit the application.

ARCHITECTURAL FEATURES

A number of special features designed for architects and engineers are provided for speed and efficiency:

- * Automatic wall command (with intersection trim).
- * Automatic window insertion
- * Automatic door insertion
- * Area and perimeter calculations

These capabilities, together with user definable line types, cross hatching, fillets, and variable line types allow rapid and accurate layout of drawings and details.



COLUMN DETAIL

MICROTECTURE

DataCAD2 SOFTWARE COMPARISON CHART

218 WEST MAIN STREET CHARLOTTESVILLE, VA 22901

804/295-2600

GENERAL INFORMATION

Release Date	1/1/85
Price	\$ 2,495.00
Current Release Version	1.2b
Next Release	6/1/85
Warranty	30 days
Updates for 1 Year	No Charge
Updates, Annual Fee	\$ 450.00

VENDOR INFORMATION

Technical Support	Yes
Ease of Learning	Rated Best
Ease of Use	Rated Best
Manual	150 pages
Tutorial	Sample Drawings
Demo Program on Disk	Yes
Videotape	6/1/85
On-Line Help Menus	6/1/85
Toll Free Number	6/1/85
Training Program	Extra Charge
Newsletter	Yes
Copy Protected	No
Use Protected Hardware	No

HARDWARE

Hardware Sales	Yes
Supports High Resolution Color	Yes
Monitors Supported	6
Intel 8087, 80287 Support	Yes

DISPLAY

Available Layers	1024
Menu On-Screen	Yes
Scroll and Pan Icons On-Screen	Yes
Simultaneous Colors	up to 256
Mixed Colors On Any Layer	Yes
Display Line Type On-Screen	Yes
Pan and Zoom	Yes
Multiple Windows Saved	10
Redraw Time	Fast
Screen Drawing Area	up to 58 sq. in.
Aspect Ratio Correction	Automatic
Rubberbanding of Lines	Yes
Different X, Y Grid Spacings	Yes
Grid in X, Y and Z axis	No
Grid can be Rotated	Yes
Grid Origin Relocation	Yes
Separate Snap/Display Grid	Yes
Grids Associated With Layers	Yes
Zoom and Scroll Interrupt	Yes
Discrete Scaling of Display	Yes
Mixed Line-Types on Any Layer	Yes
Vary Line Width On-Screen	Yes

DRAWING CREATION

Format	FP Reals
Dynamic Tracking	No
Mirror Imaging Directions	On Screen
Create Rectangle and Ellipse	Both
Orthogonal Mode	Yes
Display Object Attributes	Yes
CrossHatch Patterns Provided	55 Types
User Definable Hatch and Fill	Yes
Fill Polygon	No
Draw Parallel Lines	Yes
Auto-Draw of Windows, Doors	Yes
Standard Line Types	4
User Definable Line Types	10
Arrowheads	1 Type

EDITING

Editing Convenience	Rated Best
Erase Object	Yes
Erase Contents of Window	Yes
Save Part of Drawing	Yes
Save Layer	Yes
Search/Replace Symbols	No
Vertex Snap	Yes
Move Objects Between Layers	Yes
Copy Objects Between Layers	Yes
Scale Objects	Yes
Scale X, Y Axes Independently	Yes
Stretch X, Y Independently	No
Scale Text Height and Width	Yes
Text at Any Angle	Yes
Erase Last Command	Yes
Undo Feature	Yes

DIMENSIONING

Automatically Dimensions Lines	Yes
Diagonal Lines	Yes
Architectural Units	Yes
Decimal Units	Yes
Metric Units	Yes
Engineering Units	Yes
Termination Types Provided	4
Area/Perimeter Calculations	Yes
Entries in Feet and Inches	Yes
Change Units of Measure	Yes
Absolute Coordinates	Yes
Relative Coordinates	Yes
Polar Coordinates	Yes
Dimensions at Any Angle	Yes

CURVE HANDLING

Filletts	Yes
Tangents	Yes
Radius Circle	Yes
Diameter Circle	Yes
2 Pt. Circle	Yes
3 Pt. Circle	Yes
2 Pt. Arc	Yes
3 Pt. Arc	Yes
Ellipses	Yes

DATABASING

Template Library Provided	Yes
Number of Template Libraries	Unlimited
Symbols Displayed On-Screen	Yes
Number of Symbols/Library	256
Number of Attributes/Symbol	16
Characters Per Attribute	20
Flexible Database Extraction	Yes
Arithmetic Operations	Yes
Text and Line Types in Symbols	Yes
On-Screen Selection of Symbols	Yes
User-Definable Template Forms	Yes

PLOTTING

Specify Size of Plot	Yes
Specify Start Point of Paper	Yes
View Layout Before Plotting	Yes
Partial Plot	
Line	Yes
Shape	Yes
Area	Yes

OTHER FEATURES

- * Interface to Project Costing
- * Three Dimensional CAD Software 6/1/85
- * Tab-To-Layer Command
- * IBM VDI Graphics Support
- * Automatic Wall Intersection Trim

NOTE:

The ratings and comparisons listed on this chart are based on an independent software evaluation.